



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/372,835	08/12/99	RUSSELL	D 774976.0007-

R THOMAS PAYNE
CUMMINGS & LOCKWOOD
FOUR STAMFORD PLAZA
STAMFORD CT 06904

MM92/0509

EXAMINER

CHURCH, C

ART UNIT	PAPER NUMBER
----------	--------------

2876

DATE MAILED: 05/09/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

Applicant(s)

Examiner

Group Art Unit

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-19 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-19 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Serial No. 372,835
Art Unit 2876

-2-

Drawings are required.

Applicant is required to update the continuing data on page 1 of the specification.

Claims 1, 2, 6 and 10-19 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The metes and bounds of these claims cannot be ascertained since the x-ray energy and attenuation have not been specified.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-19 are rejected under 35 U.S.C. § 103 as being unpatentable over Zinreich. Zinreich teaches a marker system and method comprising radiolucent markers 20 formed from gels comprising barium selected to yield a desired x-ray density under

Serial No. 372,835
Art Unit 2876

-3-

exposure to specified radiation energy so as not to obscure the desired image. See lines 2-5 of column 3 and lines 12-15 of column 6. The per cent attenuation of Zinreich's markers would have been an obvious function of the desired legibility. The Zinreich technique is applicable to any part of a patient's body, and Official notice is taken that the x-ray energy typically employed in medical imaging ranges between 20 and 140 KV. See, for example, *Christensen's Physics Of Diagnostic Radiology*. Lines 12-15 of column 6 suggest the use of other metals, and aluminum would have been obvious because of its midrange atomic number.

Claims 1-19 are rejected under 35 U.S.C. § 103 as being unpatentable over DeSena. DeSena teaches a marker system and method comprising adhesive markers 3 bearing patterns formed of barium or aluminum (lines 11-13 of column 3). Lines 62-65 of column 4 suggest that the clarity of the patterns is controlled by their thickness, and It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the thickness or % attenuation of the DeSena markers to provide the desired opacity under the specified parameters such as x-ray energy. The DeSena technique is applicable to any part of a patient's body, and Official notice is taken that the x-ray energy typically employed in medical imaging ranges between 20 and 140 KV. See, for example, *Christensen's Physics Of Diagnostic Radiology*.

Any inquiry concerning this communication should be directed to Examiner Church at telephone number (703) 308-4861.

Craig E Church

Craig E. Church
Primary Examiner